

**REMARKS**

Reconsideration and allowance are respectfully requested. Claim 5 and 11 have been amended. Claims 1-16 are pending.

The Examiner objected to the claims 5 and 11 under 35 U.S.C. 112, second paragraph. Claims 5 and 11 have been carefully reviewed and revised to use language that is used in the specification. It is submitted that all claims are now in full compliance with 35 U.S. C. 112.

Claims 1-6, 8-9, and 11-15 stand rejected under 35 U.S.C. 102(e) as being anticipated by Deb (US 6,172,990). This rejection is respectfully traversed.

Deb neither discloses or suggests simultaneously comparing min terms to the selected byte as that selected byte immediately upon receipt of the selected by network switch port, and generating a frame tag based on a comparison result as soon as a last bit of the data packet is received at the network switch port.

Deb discloses a media access control micro-RISC stream processor configured for performing localized processing of a data packet, and appending to the data packet a data structure based on the processing of the data packet. The appended data structure enables reduction of a centralized CPU workload. Deb illustrates in Figures 2A and 3B a micro-RISC stream processor 114b and a micro-RISC stream processor 114c. As illustrated in Figure 3B, each micro-RISC processor 114 includes an instruction register 304, an execution instruction register 306, and execution logic 312 configured for controlling the analyzing computer 337 (Column 13, line 69 to column 14, line 24 of Deb). In addition, Deb requires buffering using a pipelined register at 323 to enable processing of the data (column 13, lines 36-58).

Deb neither teaches nor suggests storing a plurality of templates configured for identifying respective data formats, where each template includes at least one min term configured for comparing a corresponding prescribed value to a corresponding selected byte of the incoming data packet. Deb utilizes an executable microcode. Although the micro-RISC stream processor 114b may be utilized for identifying a class of

protocol using a set of predefined mnemonics (see column 12, lines 49-56), a compiler still is necessary to generate the microcode for the micro RISC-stream processor.

Hence, the micro-RISC stream processor 114 still must perform sequential execution of instructions, and cannot simultaneously compare the selected byte to the min terms that correspond to the selected byte immediately upon receipt of the selected byte by the network switch port. Rather, Deb relies on pipeline buffering to provide sequential execution of microcode instructions by an expensive processor in the MAC layer core. Furthermore, Deb does not teach or suggest generating a frame tag based on a comparison result as soon as a last bit of the data packet is received at the network switch port.

With the claimed invention, the speed of evaluation is improved. Resolution of a packet classification and associated switch control attributes can occur as soon as the last bit of the packet arrives at the switch port, thereby substantially reducing overall switch latency.


Claims 7 and 16 stand rejected under 35. U.S. C. 103(a) as being unpatentable over Deb in view of Connery (US 6,570,884) and claim 10 stands rejected as being unpatentable over Deb in view of Bellenger (US 5,802,054). These claims depend from the independent claims 1 and 11 and are considered to be allowable for the reasons advanced above with regard to claims 1 and 11 and for the additional reasons that the added subject matter thereof is neither taught nor suggested by the prior art of record.

In view of the above, it is believed this application is in condition for allowance, and such a Notice is respectfully solicited.

Amendment Filed February 3, 2004  
Appln. No. 09/637,015

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-0687, under Order No. 95-319, and please credit any excess fees to such deposit account.

Respectfully submitted,

  
Edward J. Stemberger  
Registration No. 36,017  
(202)261-1014

Customer No. 20736

**Date: February 3, 2004**